

Date: Thu, 5 May 94 04:30:12 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #132
To: Ham-Ant

Ham-Ant Digest Thu, 5 May 94 Volume 94 : Issue 132

Today's Topics:

 Antenna on Saturn
 Formula for determining
For Sale: New Mosley 2m 14-2 Antenna
 kites <--> antennas ?
 longwire antenna question

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 4 May 1994 08:01:32 GMT
From: vigra.com!steve@network.ucsd.edu
Subject: Antenna on Saturn
To: ham-ant@ucsd.edu

--=}>> On 28 Apr 94 22:24:46 GMT, klaudon@pica.army.mil said:

> Here is an update from what I have learned so far:

> DO NOT DRILL A HOLE IN THE ROOF OF YOUR SATURN AUTOMOBILE!

> The roof material on the sedan and sports coupe is aluminum.
> I was advised by a fellow Saturn owner and ham, that he has researched this
> issue with the factory, etc. and was told not to do it. The dissimilar
> metals in contact (the connector and roof) will never maintain a good
> mechanical or electrical seal, causing poor RF performance, and eventual
> rain leakage as well.

> He uses a trunk-lip mounted antenna and gets FB results.
> [...]

Hmm.. do you know what the trunk lid is made of? Just yesterday, I drilled a 3/4" hole in the center of my '93 Saturn SC2 trunk (yes, it hurt), for a 2m/70cm antenna mount. I've had bad luck with the lip-mount deals, and the Saturn styling makes the sides of the trunk slope downward quite a bit.

Putting a big spike on that sleek roof never crossed my mind.. :)

Running the wire to the dash was very easy. From the trunk, to beside the rear seat (such that it is), and then under the floor-board lip along the edge to the dash. It's entirely hidden, and yet accessible.

Do you know anything about the radio sensitivity of the Saturn electronics? How about noise emission? I haven't noticed any of either from my HT.

My little brother commented that my car now looks just like one of his mini "remote-control" cars, with the coupe styling and big antenna in the center of the back.. :-)

BTW, the huge deep glove box on the Saturns looks like it would swallow a mobile rig just fine. My only concern would be the ventilation. Has anyone tried this? It would be a great theft deterrent and there's not much room elsewhere for it.

-Steve

Steve Haehnichen
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Date: Wed, 4 May 1994 14:49:33 GMT
From: pa.dec.com!nntpd2.cxo.dec.com!iamu.chi.dec.com!little@decwrl.dec.com
Subject: Formula for determining
To: ham-ant@ucsd.edu

In article <940502215817986@chowda.com>, gary.perry@chowda.com (Gary Perry) writes:

|>GS>Is there a formula for determining the optimum distances between the
|>GS>driven element and the parasitic elements in a yagi beam?
|>
|>GS>I know the driven element should be a 1/2 wavelength and the
|>GS>reflector 5% longer and the director 5% shorter in a 3 element beam.
|>GS>How do I determine the distance between the driven element and the

|>GS>parasitic elements? What about if the yagi has more than 3
|>GS>elements, say 7?
|>
|>Hello George, If i remember right, the spacing between elements should
|>be between .15 and .25 wavelengths at the operating frequency of the
|>antenna. The spacing you choose will also determine the front to back
|>rejection and also the gain of the antenna. As for multi element
|>antennas, the same spacing can be used. Hope this is of help to you.

15 to .25 wavelengths is a wide range though. Also, optimum depends upon what you want to optimize. Grab a copy of something like yagimax or one of the other antenna modelling programs and use that to determine what sort of antenna you want to build. Also remember that for VHF/UHF antennas, you'll need to consider the effect of the boom and element mounting scheme on the length of the elements.

In general, spacing of elements will affect the gain, pattern, and impedance of a Yagi. So you can typically trade off one for another, but rarely can you get something that is optimal in all. In other words, the antenna with the highest forward gain won't necessarily have the highest front to back ratio. It also might not have the cleanest pattern or highest resistance to slight differences in construction technique.

Pick up a copy of the ARRL Antenna Book for some more information on antenna design.

73,
Todd
N9MWB

Date: 4 May 94 21:12:10 GMT
From: agate!howland.reston.ans.net!torn!news.cs.uwindsor.ca!
milan.galadrfal.engn.uwindsor.c@ucbvax.berkeley.edu
Subject: For Sale: New Mosley 2m 14-2 Antenna
To: ham-ant@ucsd.edu

For Sale: Mosley 2m Antenna, Model AM-14-2, brand new, never assembled and still in the box.
Lists for \$290, taking offers, or will trade for ICOM-R1 + \$

Reply to: milan@engn.uwindsor.ca

Date: Tue, 03 May 1994 14:01:46 -0500
From: ihnp4.ucsd.edu!swrinde!elroy.jp1.nasa.gov!ncar!asuvax!pitstop.mcd.mot.com!

mcdphx!schbbs!mothost!lmpsbbs!NewsWatcher!user@network.ucsd.edu
Subject: kites <--> antennas ?
To: ham-ant@ucsd.edu

In article <gganderson.354.0@augustana.edu>, gganderson@augustana.edu
(Kevin Anderson -7325) wrote:

> I was out on Sunday flying a few small kites with my
> family. With us were some experienced kite flyers,
> who were flying (among other things) a very stable
> kite with a windsock tail that seemed handled the variable
> winds quite magnificantly. It got me thinking....
>
> Anyone on this list with experience using kites to loft
> antennas? I would like to hear your experiences.
>

We have used one to measure the antenna pattern of a very low frequency
(0.5 MHz range) mobile mounted antenna. We just put a small battery
driven transmitter on the kite with a very small dipole antenna (in
wavelengths) and pulled the kite, at a constant altitude, across the field
where the car was parked. With a transit, we got the angle, and with a
constant height, we were able to work out the classical antenna pattern
down to about 20 degrees or so. It was good enough for what we wanted.

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|Allen Davidson                |Internet: CASR04@email.mot.com|
|Motorola LMPs Research        |MotoMail: CASR04            |
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+-----+
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Date: 5 May 94 03:11:07 GMT
From: agate!ihnp4.ucsd.edu!usc!howland.reston.ans.net!europa.eng.gtefsd.com!
news.umbc.edu!eff!news.duke.edu!godot.cc.duq.edu!duq3.cc.duq.edu!
SYJERRY@ucbvax.berkeley.edu
Subject: longwire antenna question
To: ham-ant@ucsd.edu

is a longwire antenna solid wire or stranded wire ? do I strip the
insulation ? what gauge of wire to use (for tx and for rx) ?

please email response if possible.
thanks in advance

73s de jerry n3rkd

End of Ham-Ant Digest V94 #132
